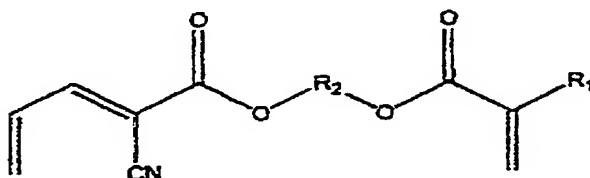


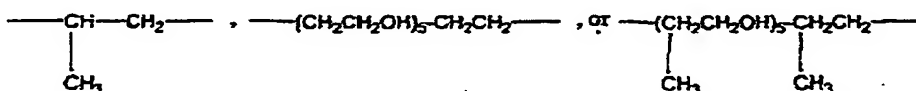
In the claims:

[Claim 1] (Withdrawn) Reactive monomers of the formula:



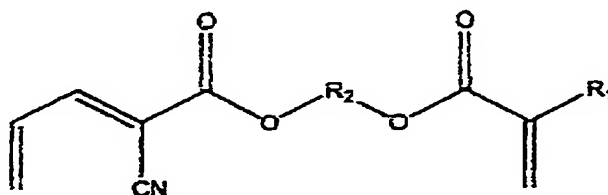
wherein R_1 is H or CH_3 and R_2 is a substituted or unsubstituted alkyl, alkenyl, alkynyl, alkoxyalkyl, poly(oxyalkyl), aryl, cycloalkyl, heterocyclyl radical wherein the substituent when present is at least one alkyl, alkenyl, alkynyl, alkoxyalkyl, poly(oxyalkyl), aryl, cycloalkyl, heterocyclyl radical or halogen and wherein the monomer is a liquid at ambient temperature.

[Claim 2] (Withdrawn) Reactive monomers of claim 1 wherein R_2 is $-CH_2CH_2-$, $-CH_2CH_2CH_2-$,



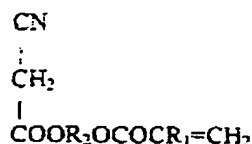
[Claim 3] (Withdrawn) Adhesives and polymers formed by the polymerization of the reactive monomers of claim 1.

[Claim 4] (Currently amended) Adhesive and coating compositions containing reactive monomers of claim 1 of the formula:



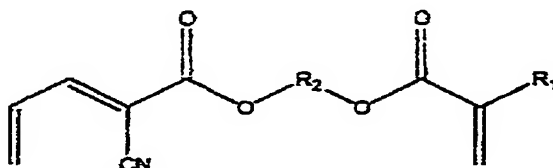
wherein R_1 is H or CH_3 and R_2 is a substituted or unsubstituted alkyl, alkenyl, alkynyl, alkoxyalkyl, poly(oxyalkyl), aryl, cycloalkyl, heterocyclyl radical wherein the substituent when present is at least one alkyl, alkenyl, alkynyl, alkoxyalkyl, poly(oxyalkyl), aryl, cycloalkyl, heterocyclyl radical or halogen and wherein the monomer is a liquid at ambient temperature.

[Claim 5] (Withdrawn) A method of synthesizing reactive monomers of claim 1 by reaction of acrolein with esters of the formula



wherein R_1 is H or CH_3 and R_2 is alkyl, alkenyl, alkynyl, alkoxyalkyl, poly(oxyalkyl), aryl, cycloalkyl, heterocyclyl radical or is one of these moieties substituted with one or more of the other moieties and could also contain halogen.

[Claim 6] (Currently amended) A reactive monomer composition comprising: the reactive monomer ~~according to claim 1~~ of the formula:



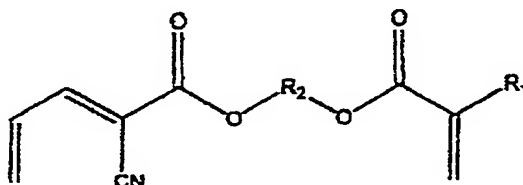
wherein R_1 is H or CH_3 and R_2 is a substituted or unsubstituted alkyl, alkenyl, alkynyl, alkoxyalkyl, poly(oxyalkyl), aryl, cycloalkyl, heterocyclyl radical wherein the substituent when present is at least one alkyl, alkenyl, alkynyl, alkoxyalkyl, poly(oxyalkyl), aryl, cycloalkyl, heterocyclyl radical or halogen and wherein the monomer is a liquid at ambient temperature; and a stabilizer against polymerization,
 wherein the stabilizer is a free radical polymerization inhibitor, present in an amount of from 0.001% to 1% by weight of the monomer or an anionic polymerization inhibitor present in an amount of from 0.00001% to 1% by weight of the monomer.

[Claim 7] (Withdrawn) The reactive monomers of claim 1 wherein the monomer can be polymerized via anionic mechanisms, cationic mechanisms, radical mechanisms, or a combination thereof.

[Claim 8] (Withdrawn) The reactive monomers of claim 1 wherein the monomer can be cured after polymerization to form rubbery, thermoplastic, or crosslinked polymers.

- [Claim 9] (Withdrawn) The reactive monomers of claim 1, wherein the monomer can be polymerized at ambient temperature when spread as a film between two substrates.
- [Claim 10] (Withdrawn) The reactive monomers of claim 9, wherein the substrates are made of metal, plastic, rubber, glass, wood, paper, live soft tissue or bone tissue.
- [Claim 11] (Withdrawn) Compositions based on reactive monomers of claim 1 containing anionic polymerization initiators, cationic polymerization initiators, free-radical polymerization initiators, compounds generating radicals or ions under visible, ultraviolet or electron beam irradiation.
- [Claim 12] (Previously presented) Compositions based on reactive monomers of claim 1 containing polymeric thickeners, viscosity regulators, plasticizers, thixotropic agents, compatibilizers, adhesion promoters, pigments, colourants, fillers, deodorants and perfumes.
- [Claim 13] (Withdrawn) Compositions based on reactive monomers of claim 1 containing other monomers with a reactive bond, including but not limited to cyanoacrylates.
- [Claim 14] (Withdrawn) Application of reactive monomers of claim 1 in adhesives and coatings industry and medicine, and in the manufacture of positive and negative photo or electron beam resists.
- [Claim 15] (Withdrawn) The reactive monomer according to claim 1, wherein R₂ has from 1 to 16 carbon atoms.
- [Claim 16] (Withdrawn) The reactive monomer according to claim 1, wherein R₂ has from 1 to 6 carbon atoms.
- [Claim 17] (Previously presented) The reactive monomer composition according to claim 6, wherein the free-radical polymerization inhibitor is hydroquinone, p-methoxyphenol, or t-butyl cathecol.
- [Claim 18] (Previously presented) The reactive monomer composition according to claim 6, wherein the anionic polymerization inhibitor is sulphur dioxide, hydrogen fluoride, phosphoric acid, phosphonic acid, sulfuric acid, sulphonic acid, carboxylic acid, organic sulfonic acid, sultone, boron trifluoride, boron trifluoride complexes, or phosphazene.

- [Claim 19] (Withdrawn) The reactive monomers of claim 8, wherein the monomer is cured stepwise to produce a crosslinked polymer from a rubbery or thermoplastic polymer.
- [Claim 20] (Withdrawn) The reactive monomers of claim 9, wherein the polymerized monomer forms an adhesive bond.
- [Claim 21] (Withdrawn) A reactive monomer composition comprising:
the reactive monomer according to claim 1; and
a polymerization initiator.
- [Claim 22] (Withdrawn) The reactive monomer composition according to claim 21, wherein the polymerization initiator is an anionic polymerization initiator, cationic polymerization initiator, free-radical polymerization initiator, or a combination thereof.
- [Claim 23] (Withdrawn) The reactive monomer composition according to claim 22, wherein the anionic polymerization initiator is pyridine, aminopyridine, vinylpyridine, methoxyethylpyridine, piperidine, picoline, lutidine, N,N-dimethyl-m-toluidine, triphenylphosphine, triethylphosphine, tribenzylamine, triethylamine, benzyldimethylamine, diethylenetriamine, benzyltriethylamine, tribenzylamine, poly(4-vinylpyridine), calixarene, polyethyleneglycol, phenolformaledehyde resins, vinylimidazole, triethanolaminatotitanium, aminosilanes, phosphates, metal acetylacetonates, N-(oxydiethylen)benzothiazole-2-sulfenamide, bismuth dimethyldithiocarbonate, or a combination thereof.
- [Claim 24] (Withdrawn) The reactive monomer composition according to claim 22, wherein the free-radical polymerization initiator is methylethylketone peroxide, cyclohexyl peroxide, cumene hydroperoxide, dibenzoyl peroxide, or a combination thereof.
- [Claim 25] (Withdrawn) Reactive monomers of the formula:



wherein R₁ is H and R₂ is a substituted or unsubstituted alkyl, alkenyl, alkynyl, alkoxyalkyl, poly(oxyalkyl), aryl, cycloalkyl, or heterocyclyl radical, wherein the

substituent when present is at least one alkyl, alkenyl, alkynyl, alkoxyalkyl, aryl, cycloalkyl, or heterocyclyl radical or halogen and wherein the monomer is a liquid at ambient temperature.